

PRM27

FEASIBILITY, COMPARABILITY, AND RELIABILITY OF THE STANDARD GAMBLE COMPARED WITH THE RATING SCALE AND TIME TRADE-OFF TECHNIQUES IN THE EQ-5D-5L VALUATION STUDY

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OBJECTIVES: This study was conducted in order to compare the SG with the rating scale (RS) and time trade-off (TTO) techniques in terms of their feasibility, comparability, and reliability in the EQ-5D-5L valuation survey of the general Korean population. **METHODS:** Five-hundred members of the general Korean population were recruited using a multi-stage quota sampling method in Seoul and its surrounding areas, Korea. Respondents evaluated the 9 EQ-5D-5L health states using a visual analogue scale (VAS), SG and TTO during a personal interview. Feasibility was assessed in terms of the level of difficulty, administration time, and inconsistent responses. Comparability was evaluated using correlation and the Bland-Altman approach. Test-retest reliability was analyzed using the intraclass correlation coefficient (ICC). **RESULTS:** Of the three methods, VAS was the easiest and quickest method to respond. The SG method did not differ significantly compared to the TTO method in administration time as well as the level of difficulty. The SG and TTO values were highly correlated ($r=0.992$), and the average mean difference between the SG and the TTO values was 0.034. The ICCs of the VAS, SG, and TTO scores were 0.906, 0.841, and 0.827, respectively. **CONCLUSIONS:** This study suggests that the SG method compared with the VAS and TTO method was feasible and offered a reliable tool for population-based, health state valuation studies in Korea.

PRM28

A REFINED COMORBIDITY INDEX FOR THE STUDIES OF HEALTH RELATED QUALITY OF LIFE

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OBJECTIVES: To refine Health-related Quality of Life (HRQL) Physical and Mental Comorbidity Indices into one single composite index, which can be feasible for risk adjustment in the studies of HRQL. **METHODS:** The 2007 Medical Expenditure Panel Survey (MEPS), a nationally representative database in the United States, was used for refining the comorbidity index. The SF-12 in the MEPS was the measure of HRQL and Clinical Classification Codes in the MEPS indicated individual disease conditions. The least absolute shrinkage and selection operator (LASSO) was applied to select disease conditions significantly associated with the SF-6D scores which were converted from SF-12 physical and mental data. Confirmatory Factor Analysis (CFA) was used to identify the best disease dimensional structure in the comorbidity index. The validation in terms of prediction accuracy for HRQL was evaluated in the 2009 MEPS. There is no overlap of people between the 2007 and 2009 databases ensuring that the validation set is independent of the data used for refining the index. Prediction errors and model R^2 were compared between our refined index and Charlson Comorbidity Index, a widely used risk adjustment tool today. **RESULTS:** Fourteen clinical conditions were identified by LASSO and then categorized into 9 disease dimensions by CFA. Statistical weights for disease dimensions were derived based on the regression model predicting HRQL. The R^2 in the model using our refined index was higher than that in the model using Charlson index (0.21 vs. 0.08). The average prediction error from the model using our index was smaller than that obtained from the model using Charlson index (0.018 vs. 0.021). **CONCLUSIONS:** In the context of HRQL outcomes, comorbidity index scores estimated by our refined index had better prediction than those from Charlson index. Further validation of our refined index is needed in other measures of HRQL and health care settings.

PRM29

PRELIMINARY VALIDATION OF THE WORK PRODUCTIVITY ACTIVITY IMPAIRMENT (WPAI) IN CAREGIVERS OF CHILDREN HOSPITALIZED FOR RESPIRATORY ILLNESS (WPAI: CHRI) IN GERMANY AND CANADA

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OBJECTIVES: Parents of hospitalized infants experience emotional and economic stress and may need to take time away from work. However, parental burden due to lost work and decreased work productivity has not been thoroughly evaluated. The Parent Burden Study aims to determine the quality of life and economic burden on parents of infants who have been hospitalized for RSV/LRTI in Canada, Germany, Greece, Korea, Slovenia and Taiwan. This study is a preliminary validation of the WPAI in caregivers of children hospitalized with a respiratory illness (WPAI:CHRI). **METHODS:** Parents of infants hospitalized for respiratory illness completed a survey at the time of hospital discharge. The relationship of WPAI: CHRI measures of work absenteeism, work presenteeism, overall work productivity loss, and daily activity impairment were tested relative to binary categories above and below median values of the State Trait Anxiety Index (STAI) Trait domain, the Parental Stressor Scale: Hospitalized Infant (PSS:HI) and the length of hospital stay (LOS). **RESULTS:** Seventy-two parents completed the survey; 27 were currently employed. On average, parents reported 37.9% work absenteeism, 55.0% presenteeism, 38.2% overall work productivity loss, and 82.6% daily activity impairment. Higher STAI State scores were associated with higher absenteeism ($p=0.002$), presenteeism ($p=0.50$), and overall work productivity loss ($p=0.002$). Higher PSS

scores were associated with higher absenteeism ($p=0.02$), presenteeism ($p=0.526$), and overall work productivity loss ($p=0.02$). The median LOS of hospitalized infants was 4.6 days. LOS above the median was associated with higher absenteeism ($p=0.04$), presenteeism ($p=0.23$), overall work productivity loss ($p=0.05$). The high daily activity impairment did not vary by the validation measures. **CONCLUSIONS:** Preliminary WPAI:CHRI validation results indicate that it is a promising instrument for evaluating the work productivity burden of parents of hospitalized infants and warrants additional investigation. Moreover, the Parent Burden Study is appropriately designed to test this instrument.

PRM30

EVALUATING READINESS FOR WORK IN PATIENTS WITH SCHIZOPHRENIA: "THE READINESS FOR WORK QUESTIONNAIRE" (WORQ)

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OBJECTIVES: To develop a valid and reliable scale "the readiness for work questionnaire" (WoRQ), which aims to evaluate working readiness in patients with schizophrenia. **METHODS:** The WoRQ has 7 items designed to capture the patient's readiness to work as reflected by current capacity to initiate and maintain a useful activity, then a final dichotomous work readiness judgment. The initial 7 items are rated to provide graded measurements, i.e., "strongly agree," "agree," "disagree" or "strongly disagree". Content validity was then established via several sources including: targeted literature reviews; development of a preliminary conceptual framework; and phone interviews with practicing clinicians to gather insights about schizophrenia and work readiness. To establish reliability, ten practicing psychiatrists were asked to assess 12 videotaped schizophrenia patients twice within a period of 4 weeks. Raters were asked to view each video and the supporting documentation. Raters were then asked to complete the WoRQ and evaluate the patient's readiness for work. Inter-rater reliability was assessed through the calculation of intra-class correlation (ICC) coefficients at each session separately for the initial items (Items 1 to 7 rated on a scale of 1 to 4); Test-retest reliability was assessed through the calculation of ICC for the initial items between Sessions I and II. **RESULTS:** A clear consensus regarding the utility of a work readiness instrument was established amongst the clinicians interviewed. A good level of agreement was evident between raters in the assessment of readiness to work (>70% at the first rating and >80% at the second rating). Test retest for the initial items ranged from 0.42 to 0.66. **CONCLUSIONS:** These initial analyses indicate that the WoRQ may be a reliable instrument in assessing work readiness in schizophrenia. The questionnaire demonstrated good to moderate levels of inter-rater agreement and moderate test-retest reliability.

PRM31

CHINESE VALUATION OF EQ-5D HEALTH STATES WITH THE TIME TRADE-OFF METHOD

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OBJECTIVES: To generate Chinese population based EQ-5D social value set using the Time Trade-Off (TTO) method, and to compare the estimated results with those in other countries. **METHODS:** Using the Time Trade-Off (TTO) method and EQ-5D instrument, this study obtains the original data for a population sample from five cities in China including Beijing, Guangzhou, Shenyang, Chengdu and Nanjing. With each respondent valuing 13 hypothetical health states, the preference weights for all EQ-5D health states are then estimated using econometric models. **RESULTS:** The major findings show that among the EQ-5D five dimensions for the Chinese population, mobility for utility determination seems to be the most important one, followed by pain/discomfort, self-care, anxiety/depression, and usual activity, which is similar to the order of the US population. In terms of utility score distributions across 243 states, the estimated value set for China is mostly correlated to that of Zimbabwe, compared to those of the US, UK, Japan, Korea, Argentina. **CONCLUSIONS:** This study is the first attempt to provide a Chinese population-based utility value set for health related quality of life, filling a critical gap when conducting health technology assessment (HTA) in general and economic cost-utility analysis in particular for the Chinese population.

PRM32

RELIABILITY AND VALIDITY OF AN INSTRUMENT USED IN A TOBACCO CESSATION INTERVENTION STUDY AMONG PATIENTS WITH DIABETES

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OBJECTIVES: To report on the reliability and validity of an instrument used among diabetic patients who smoke. The instrument that was designed and pretested is a 41-item questionnaire to evaluate knowledge on diabetes, physician practice, and their attitudes towards a smoking cessation intervention when applied by their physicians. **METHODS:** We developed the questionnaire based on information drawn from the literature related to diabetes care and management and smoking negative effect. Questions were adapted and modified from other relevant literature. To ensure face, content and construct validity, the questionnaire was reviewed by six pharmacists, five of whom were faculty members with experience and expertise in survey instruments development and research. Modifications suggested included, but not limited to adding multiple choice responses to some of the knowledge and practice items, moving some of the knowledge items to the practice